CLAIMS

1. (currently amended) A compound of the formula (I)

$$R^{\frac{1}{4}}$$
 $R^{\frac{4}{5}}$
 $R^{\frac{5}{5}}$
 $R^{\frac{5}{5}}$
 $R^{\frac{5}{14}}$
 $R^{\frac{5}{5}}$
 $R^{\frac{5}{14}}$
 $R^{\frac{5}{5}}$
 $R^{\frac{5}{14}}$
 $R^{\frac{5}{5}}$
 $R^{\frac{5}{14}}$

wherein

A represents an aryl or heteroaryl ring;

 R^1 , R^2 , and R^3 independently from each other represent hydrogen, halogen, nitro, cyano, C_1 - C_6 -alkyl, hydroxy, or C_1 - C_6 -alkoxy, wherein C_1 - C_6 -alkyl and C_1 - C_6 -alkoxy can be further substituted with one to three identical or different radicals selected from the group consisting of halogen, hydroxyl, and C_1 - C_4 -alkoxy;

R⁴ represents: C₁-C₆-alkyl, which can be substituted by up to three radicals independently selected from the group consisting of hydroxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl; C₃-C₈-cycloalkylcarbonyl, which can be substituted by up to three radicals independently selected from the group consisting of C₁-C₆-alkyl, hydroxy, oxo, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl; C₁-C₆-alkylcarbonyl, which is substituted by phenyl-C₁-C₆-alkoxy or phenyl-C₁-C₆-alkoxycarbonyl, which in the phenyl moiety can be substituted by halogen, C₁-C₆-alkyl, hydroxy, C_1 - C_6 -alkoxy, C_1 - C_6 -alkoxycarbonyl, or hydroxycarbonyl; C_6 - C_{10} -arylcarbonyl, which is substituted by one, two, or three radicals independently selected from the group consisting of halogen, cyano, nitro, C₁-C₆-alkyl, trifluoromethyl, hydroxy, C₁-C₆-alkoxy, trifluoromethoxy, amino, C_1 - C_6 -alkoxycarbonyl, hydroxycarbonyl, and phenyl; C_1 - C_6 -alkoxycarbonyl, which is substituted by one or two radicals independently selected from the group consisting of phenyl-C₁-C₆-alkoxy, phenyl-C₁-C₆-alkoxycarbonyl, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonylamino, and 5or 6-membered heterocyclyl, wherein C₁-C₆-alkoxy is further substituted by C₁-C₆alkoxycarbonyl, or hydroxycarbonyl, and 5- or 6-membered heterocyclyl is further substituted by hydroxy, [[oxo,]] C₁-C₆-alkoxycarbonyl, or hydroxycarbonyl; heteroarylcarbonyl, which is substituted by one or two radicals independently selected from the group consisting of hydroxy, amino, halogen, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl, and which can additionally be substituted by C₁-C₆-alkyl; mono- or di-C₁-C₆-alkylaminocarbonyl, wherein the alkyl moiety or at least one alkyl moiety, respectively, is substituted by C₆-C₁₀-aryl, which can be further substituted by up to three radicals independently selected from the group consisting of halogen, cyano, trifluoromethyl, C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy, trifluoromethoxy, C₁-C₆alkoxycarbonyl, and hydroxycarbonyl; C₆-C₁₀-arylaminocarbonyl or N-(C₁-C₆-alkyl)-N-(C₆-C₁₀aryl)aminocarbonyl, wherein aryl is substituted by one, two, or three radicals independently

selected from the group consisting of halogen, cyano, trifluoromethyl, C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy, trifluoromethoxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl, and wherein alkyl, when present, can be substituted by up to three radicals independently selected from the group consisting of hydroxy, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl; C₃-C₈cycloalkylaminocarbonyl or N-(C₁-C₆-alkyl)-N-(C₃-C₈-cycloalkyl)aminocarbonyl, wherein cycloalkyl can be substituted by up to three radicals independently selected from the group consisting of C₁-C₆-alkyl, hydroxy, oxo, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl, and wherein alkyl, when present, can be substituted by up to three radicals independently selected from the group consisting of hydroxy, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl; heterocyclylcarbonyl, which is substituted by one, two, or three radicals independently selected from the group consisting of C_1 - C_6 -alkyl, hydroxy, oxo, C_1 - C_6 -alkoxy, C₁-C₆-alkoxycarbonyl, phenyl-C₁-C₆-alkoxycarbonyl, hydroxycarbonyl, 5- or 6-membered heterocyclyl, 5- or 6-membered heteroaryl, and C₆-C₁₀-aryl, wherein C₁-C₆-alkyl is further substituted by hydroxy, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonyl, or hydroxycarbonyl, and wherein C₆-C₁₀-aryl can be further substituted by up to three radicals independently selected from the group consisting of halogen, cyano, trifluoromethyl, C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy, trifluoromethoxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl; N-(heterocyclyl)aminocarbonyl, wherein heterocyclyl can be further substituted by up to three radicals independently selected from the group consisting of C_1 - C_6 -alkyl, hydroxy, oxo, C_1 - C_6 -alkoxy, C_1 - C_6 -alkoxycarbonyl, hydroxycarbonyl, and phenyl- C_1 - C_6 -alkyl; a group of the formula $-C(=O)-NR^a-SO_2-R^b$, wherein R^a represents hydrogen or C₁-C₆-alkyl, and R^b represents C₁-C₆-alkyl, which can be substituted by trifluoromethyl, or R^b represents C₆-C₁₀-aryl, which can be substituted by C₁-C₆-

alkyl, halogen, cyano, nitro, or trifluoromethyl; or a group of the formula $-P(=O)(OR^c)_2$, wherein R^c represents hydrogen or C_1 - C_6 -alkyl;

 R^5 represents C_1 - C_4 -alkyl, which can be substituted with one to three identical or different radicals selected from the group consisting of halogen, hydroxy, C_1 - C_6 -alkoxy, C_2 - C_6 -alkenoxy, C_1 - C_6 -alkylthio, amino, mono- and di- C_1 - C_6 -alkylamino, arylamino, hydroxycarbonyl, C_1 - C_6 -alkoxycarbonyl, and the radical -O- C_1 - C_4 -alkyl-O- C_1 - C_4 -alkyl;

 R^6 represents hydrogen, C_1 - C_6 -alkyl, formyl, aminocarbonyl, mono- or di- C_1 - C_4 -alkylaminocarbonyl, C_3 - C_8 -cycloalkylcarbonyl, C_1 - C_6 -alkylcarbonyl, C_1 - C_6 -alkoxycarbonyl, N- $(C_1$ - C_4 -alkylsulfonyl)-aminocarbonyl, N- $(C_1$ - C_4 -alkylsulfonyl)-N- $(C_1$ - C_4 -alkyl)-aminocarbonyl-, heteroaryl, heteroarylcarbonyl, or hetero-cyclylcarbonyl, wherein C_1 - C_6 -alkyl, mono- and di- C_1 - C_4 -alkylaminocarbonyl, C_1 - C_6 -alkylcarbonyl, C_1 - C_6 -alkoxycarbonyl, heteroaryl, and heterocyclyl can be substituted with one to three identical or different radicals selected from the group consisting of aryl, heteroaryl, hydroxy, C_1 - C_4 -alkoxy, hydroxycarbonyl, C_1 - C_6 -alkoxycarbonyl, aminocarbonyl, mono- and di- C_1 - C_4 -alkylaminocarbonyl, aminocarbonyl amino, tri- $(C_1$ - C_6 -alkyl)-silyl, cyano, N-(mono- or di- C_1 - C_4 -alkylamino- C_1 - C_4 -alkyl)-aminocarbonyl, N- $(C_1$ - C_4 -alkoxy- C_1 - C_4 -alkyl)-aminocarbonyl, and halogen; or

R⁶ represents a moiety of the formula

wherein R^d is selected from the group consisting of hydrogen and C_1 - C_6 -alkyl, and n represents an integer of 1 or 2; or

 R^6 represents a group of the formula -T–U, wherein T represents a C_1 - C_6 -alkanediyl or C_2 - C_6 -alkenediyl group, and U represents: C_6 - C_{10} -aryl or 5- or 6-membered heteroaryl, each of which is substituted by one, two, or three radicals independently selected from the group consisting of halogen, C_1 - C_6 -alkyl, 5- or 6-membered heteroaryl, and a group of the formula -V–W, wherein V represents a bond or a C_1 - C_6 -alkanediyl or C_2 - C_6 -alkenediyl group, both of which can be further substituted by C_3 - C_8 -cycloalkyl, and W represents C_1 - C_6 -alkoxycarbonyl or hydroxycarbonyl; a group of the formula -C(=O) $-NR^e$ - SO_2 - R^f , wherein R^e represents hydrogen or C_1 - C_6 -alkyl, and R^f represents C_1 - C_6 -alkyl, which can be substituted by trifluoromethyl, or R^f represents C_6 - C_{10} -aryl, which can be substituted by C_1 - C_6 -alkyl, halogen, cyano, nitro, or trifluoromethyl; a group of the formula -C(=O) $-NR^g$ R h , wherein R^g represents hydrogen or C_1 - C_6 -alkyl, and R^h represents C_6 - C_{10} -aryl, which can be substituted by C_1 - C_6 -alkoxycarbonyl or hydroxycarbonyl; a group of the formula -C(=O) $-NR^g$ R h , wherein R^g represents hydrogen or C_1 - C_6 -alkyl, and C_1 0 arguments C_1 1 arguments C_1 2 arguments C_1 3 arguments C_1 4 arguments C_1 4 arguments C_1 5 arg

from each other represent hydrogen or C_1 - C_6 -alkyl; or C_6 - C_{10} -arylalkoxy, which, in the aryl part, can be substituted by halogen, C_1 - C_6 -alkyl, C_1 - C_6 -alkoxycarbonyl, or hydroxycarbonyl; or

 R^6 represents: C_3 - C_8 -cycloalkyl, which can be substituted by up to three radicals independently selected from the group consisting of C_1 - C_6 -alkyl, hydroxy, oxo, C_1 - C_6 -alkoxycarbonyl, and hydroxycarbonyl; C_2 - C_6 -alkenyl, which can be substituted by C_1 - C_6 -alkoxycarbonyl or hydroxycarbonyl; C_1 - C_6 -alkylcarbonyl, which is substituted by C_1 - C_6 -alkoxycarbonylamino; C_1 - C_6 -alkoxycarbonyl, which is substituted by phenyl- C_1 - C_6 -alkoxycarbonyl, which in the phenyl moiety can be further substituted by halogen, C_1 - C_6 -alkyl, C_1 - C_6 -alkoxycarbonyl, or hydroxycarbonyl; or a group of the formula $-SO_2$ - R^m , wherein R^m represents C_1 - C_6 -alkyl, which can be substituted by trifluoromethyl, or R^m represents C_6 - C_{10} -aryl, which can be substituted by C_1 - C_6 -alkyl, halogen, cyano, nitro, trifluoromethyl, C_1 - C_6 -alkoxycarbonyl, or hydroxycarbonyl;

 R^7 represents halogen, nitro, cyano, C_1 - C_6 -alkyl, hydroxyl, or C_1 - C_6 -alkoxy, wherein C_1 - C_6 -alkyl and C_1 - C_6 -alkoxy can be further substituted with one to three identical or different radicals selected from the group consisting of halogen, hydroxyl, and C_1 - C_4 -alkoxy; and

Y¹, Y², Y³, Y⁴, and Y⁵ independently from each other represent CH or N, wherein the ring contains either 0, 1, or 2 nitrogen atoms,

and salts thereof.

2. (currently amended) The compound of formula (I) according to claim 1, wherein

A represents an aryl or heteroaryl ring;

 R^1 , R^2 , and R^3 independently from each other represent hydrogen, halogen, nitro, cyano, C_1 - C_6 -alkyl, hydroxyl, or C_1 - C_6 -alkoxy, wherein C_1 - C_6 -alkyl and C_1 - C_6 -alkoxy can be further substituted with one to three identical or different radicals selected from the group consisting of halogen, hydroxyl, and C_1 - C_4 -alkoxy;

R⁴ represents: C₁-C₆-alkyl, which can be substituted by up to three radicals independently selected from the group consisting of hydroxyl, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl; C₃-C₈-cycloalkylcarbonyl, which can be substituted by up to three radicals independently selected from the group consisting of C₁-C₆-alkyl, hydroxy, oxo, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl; C₆-C₁₀-arylcarbonyl, which is substituted by one, two, or three radicals independently selected from the group consisting of halogen, cyano, C₁-C₆-alkyl, trifluoromethyl, hydroxy, C₁-C₆-alkoxy, trifluoromethoxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl; C₁-C₆-alkoxycarbonyl, which is substituted by one or two radicals independently selected from the group consisting of phenyl-C₁-C₆-alkoxy, phenyl-C₁-C₆-alkoxycarbonyl, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonyl, or hydroxycarbonyl, and 5- or 6-membered heterocyclyl, wherein C₁-C₆-alkoxy is further substituted by C₁-C₆-alkoxycarbonyl, or hydroxycarbonyl, and 5- or 6-membered heterocyclyl is further substituted by hydroxy, [[oxo,]] C₁-C₆-alkoxycarbonyl, or hydroxycarbonyl; heteroarylcarbonyl, which is substituted by one or two radicals independently selected from the group consisting of hydroxy, amino, halogen, C₁-C₆-alkoxy, C₁-C₆-alk

C₆-alkoxycarbonyl, and hydroxycarbonyl, and which can additionally be substituted by C₁-C₆alkyl; mono- or di-C₁-C₆-alkylaminocarbonyl, wherein the alkyl moiety or at least one alkyl moiety, respectively, is substituted by C_6 - C_{10} -aryl, which can be further substituted by up to three radicals independently selected from the group consisting of halogen, cyano, trifluoromethyl, C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy, trifluoromethoxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl; heterocyclylcarbonyl, which is substituted by one, two, or three radicals independently selected from the group consisting of C_1 - C_6 -alkyl, hydroxy, oxo, C_1 - C_6 -alkoxy, C₁-C₆-alkoxycarbonyl, phenyl-C₁-C₆-alkoxycarbonyl, hydroxycarbonyl, 5- or 6-membered heterocyclyl, 5- or 6-membered heteroaryl, and C₆-C₁₀-aryl, wherein C₁-C₆-alkyl is further substituted by hydroxy, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonyl, or hydroxycarbonyl, and wherein C₆-C₁₀-aryl can be further substituted by up to three radicals independently selected from the group consisting of halogen, cyano, trifluoromethyl, C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy, trifluoromethoxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl; or a group of the formula – C(=O)-NH-SO₂-R^b, wherein R^b represents C₁-C₆-alkyl, which can be substituted by trifluoromethyl, or R^b represents C₆-C₁₀-aryl, which can be substituted by C₁-C₆-alkyl, halogen, cyano, nitro, or trifluoromethyl;

 R^5 represents C_1 - C_4 -alkyl, which can be substituted with one to three identical or different radicals selected from the group consisting of halogen, hydroxy, C_1 - C_6 -alkoxy, C_2 - C_6 -alkenoxy, C_1 - C_6 -alkylthio, amino, mono- and di- C_1 - C_6 -alkylamino, arylamino, hydroxycarbonyl, C_1 - C_6 -alkoxycarbonyl, and the radical -O- C_1 - C_4 -alkyl-O- C_1 - C_4 -alkyl;

 R^6 represents hydrogen, C_1 - C_6 -alkyl, aminocarbonyl, mono- or di- C_1 - C_4 -alkylaminocarbonyl, C_3 - C_8 -cycloalkylcarbonyl, C_1 - C_6 -alkylcarbonyl, C_1 - C_6 -alkoxycarbonyl, N- $(C_1$ - C_4 -alkylsulfonyl)-aminocarbonyl, N- $(C_1$ - C_4 -alkylsulfonyl)-N- $(C_1$ - C_4 -alkyl)-aminocarbonyl-, heteroarylcarbonyl, or heterocyclylcarbonyl, wherein C_1 - C_6 -alkyl, mono- and di- C_1 - C_4 -alkylaminocarbonyl, C_1 - C_6 -alkylcarbonyl, and C_1 - C_6 -alkoxycarbonyl can be substituted with one to three identical or different radicals selected from the group consisting of aryl, heteroaryl, hydroxy, C_1 - C_4 -alkoxy, hydroxycarbonyl, C_1 - C_6 -alkoxycarbonyl, aminocarbonyl, mono- and di- C_1 - C_4 -alkylamino, C_1 - C_4 -

R⁶ represents a moiety of the formula

*
$$\bigcap_{N \in \mathbb{N}^d} \bigcap_{N \in \mathbb{N}^d} \bigcap_$$

wherein R^d is selected from the group consisting of hydrogen and C_1 - C_6 -alkyl, and n represents an integer of 1 or 2; or

 R^6 represents a group of the formula -T-U, wherein T represents a C_1-C_4 -alkanediyl or C_2-C_4 -alkenediyl group, and U represents: C_6-C_{10} -aryl or 5- or 6-membered heteroaryl, each of which is substituted by one, two, or three radicals independently selected from the group consisting of halogen, C_1-C_6 -alkyl, 5- or 6-membered heteroaryl, and a group of the formula -V-W, wherein V represents a bond, a C_2-C_6 -alkenediyl group, or a C_1-C_6 -alkanediyl group, the latter of which can be further substituted by C_3-C_8 -cycloalkyl, and W represents C_1-C_6 -alkoxycarbonyl or hydroxycarbonyl; a group of the formula $-C(=O)-NH-SO_2-R^f$, wherein R^f represents C_1-C_6 -alkyl, which can be substituted by trifluoromethyl, or R^f represents C_6-C_{10} -aryl, which can be substituted by C_1-C_6 -alkyl, halogen, cyano, nitro, or trifluoromethyl; or a group of the formula $-C(=O)-NHR^h$, wherein R^h represents C_6-C_{10} -aryl, which can be substituted by C_1-C_6 -alkoxycarbonyl; or hydroxycarbonyl; or

 R^6 represents: C_3 - C_8 -cycloalkyl, which can be substituted by up to three radicals independently selected from the group consisting of C_1 - C_6 -alkyl, hydroxy, oxo, C_1 - C_6 -alkoxycarbonyl, and hydroxycarbonyl; or C_2 - C_6 -alkenyl, which can be substituted by C_1 - C_6 -alkoxycarbonyl or hydroxycarbonyl;

 R^7 represents halogen, nitro, cyano, C_1 - C_6 -alkyl, hydroxyl, or C_1 - C_6 -alkoxy, wherein C_1 - C_6 -alkyl and C_1 - C_6 -alkoxy can be further substituted with one to three identical or different radicals selected from the group consisting of halogen, hydroxyl, and C_1 - C_4 -alkoxy; and

Y¹, Y², Y³, Y⁴, and Y⁵ independently from each other represent CH or N, wherein the ring contains either 0, 1, or 2 nitrogen atoms.

3. (currently amended) The compound of formula (I) according to claim 1, wherein

A represents a phenyl, naphthyl, or pyridyl ring;

R¹, R², and R³ independently from each other represent hydrogen, fluoro, chloro, bromo, nitro, cyano, methyl, ethyl, trifluoromethyl, or trifluoromethoxy;

 R^4 represents: C_1 - C_4 -alkyl, which can be substituted by up to two radicals independently selected from the group consisting of hydroxy, C_1 - C_4 -alkoxycarbonyl, and hydroxycarbonyl; C_3 - C_6 -cycloalkylcarbonyl, which can be substituted by up to two radicals independently selected from the group consisting of C_1 - C_4 -alkyl, hydroxy, oxo, C_1 - C_4 -alkoxycarbonyl, and hydroxycarbonyl; benzoyl, which is substituted by one, two, or three radicals independently selected from the group consisting of fluoro, chloro, bromo, cyano, C_1 - C_4 -alkyl, trifluoromethyl, hydroxy, C_1 - C_4 -alkoxy, trifluoromethoxy, C_1 - C_4 -alkoxycarbonyl, and hydroxycarbonyl; C_1 - C_4 -alkoxycarbonyl, which is substituted by one or two radicals independently selected from the group consisting of benzyloxy, benzyloxycarbonyl, C_1 - C_4 -alkoxy, C_1 - C_4 -alkoxycarbonylamino, pyrrolidinyl, piperidinyl, and morpholinyl, wherein C_1 - C_4 -alkoxy is further substituted by C_1 - C_4 -alkoxycarbonyl or hydroxycarbonyl, and wherein pyrrolidinyl, piperidinyl, and morpholinyl is

further substituted by hydroxy, $[(\infty,)] C_1-C_4$ -alkoxycarbonyl, or hydroxycarbonyl; furylcarbonyl, thienylcarbonyl, oxazolylcarbonyl, thiazolylcarbonyl, pyridylcarbonyl, or pyrimidinylcarbonyl, each of which is substituted by one or two radicals independently selected from the group consisting of hydroxy, amino, fluoro, chloro, bromo, C₁-C₄-alkoxy, C₁-C₄alkoxycarbonyl, and hydroxycarbonyl, and each of which can additionally be substituted by C₁-C₄-alkyl; mono- or di-C₁-C₄-alkylaminocarbonyl, wherein the alkyl moiety or at least one alkyl moiety, respectively, is substituted by phenyl, which can be further substituted by up to three radicals independently selected from the group consisting of fluoro, chloro, bromo, cyano, trifluoromethyl, C₁-C₄-alkyl, hydroxy, C₁-C₄-alkoxy, trifluoromethoxy, C₁-C₄-alkoxycarbonyl, and hydroxycarbonyl; tetrahydrofurylcarbonyl, tetrahydropyranylcarbonyl, piperidinylcarbonyl, piperazinylcarbonyl; or morpholinylcarbonyl, each of which is substituted by one or two radicals independently selected from the group consisting of C_1 - C_4 -alkyl, hydroxy, oxo, C_1 - C_4 -alkoxy, C₁-C₄-alkoxycarbonyl, benzyloxycarbonyl, hydroxycarbonyl, piperidinyl, morpholinyl, pyridyl, and phenyl, wherein C₁-C₄-alkyl is further substituted by hydroxy, C₁-C₄-alkoxy, C₁-C₄alkoxycarbonyl, or hydroxycarbonyl, and wherein phenyl can be further substituted by up to three radicals independently selected from the group consisting of fluoro, chloro, bromo, cyano, trifluoromethyl, C₁-C₄-alkyl, hydroxy, C₁-C₄-alkoxy, trifluoromethoxy, C₁-C₄-alkoxycarbonyl, and hydroxycarbonyl; or a group of the formula $-C(=O)-NH-SO_2-R^b$, wherein R^b represents C_1 -C₄-alkyl, which can be substituted by trifluoromethyl, or R^b represents phenyl, which can be substituted by C₁-C₄-alkyl, fluoro, chloro, bromo, cyano, nitro, or trifluoromethyl;

R⁵ represents methyl or ethyl;

 R^6 represents hydrogen, C_1 - C_6 -alkyl, mono- or di- C_1 - C_4 -alkylaminocarbonyl, C_1 - C_6 -alkylaminocarbonyl, C_1 - C_6 -alkylaminocarbonyl, wherein C_1 - C_6 -alkylaminocarbonyl can be substituted with one to three identical or different radicals selected from the group consisting of hydroxy, C_1 - C_4 -alkoxy, hydroxycarbonyl, C_1 - C_6 -alkoxycarbonyl, aminocarbonyl, mono- and di- C_1 - C_4 -alkylaminocarbonyl, amino, mono- and di- C_1 - C_4 -alkylamino; or

R⁶ represents a moiety of the formula

wherein R^d is selected from the group consisting of hydrogen and C_1 - C_4 -alkyl, and n represents an integer of 1 or 2; or

R⁶ represents a group of the formula -T-U, wherein T represents a C₁-C₄-alkanediyl group, and U represents: phenyl, furyl, thienyl, oxazolyl, thiazolyl, or pyridyl, each of which is substituted

Amendment Submitted with RCE
Application No. 10/590,770
Amendment submitted September 21, 2010

by one or two radicals independently selected from the group consisting of fluoro, chloro, bromo, C_1 - C_4 -alkyl, thienyl, pyridyl, and a group of the formula -V-W, wherein V represents a bond or a C_1 - C_4 -alkanediyl or C_2 - C_4 -alkenediyl group, and W represents C_1 - C_4 -alkoxycarbonyl or hydroxycarbonyl; a group of the formula -C(=O)-NH- SO_2 - R^f , wherein R^f represents C_1 - C_4 -alkyl, which can be substituted by trifluoromethyl, or R^f represents phenyl, which can be substituted by C_1 - C_4 -alkyl, fluoro, chloro, bromo, cyano, nitro, or trifluoromethyl; or a group of the formula -C(=O)- NHR^h , wherein R^h represents phenyl, which can be substituted by C_1 - C_4 -alkoxycarbonyl or hydroxycarbonyl, or

 R^6 represents: C_3 - C_6 -cycloalkyl, which can be substituted by up to two radicals independently selected from the group consisting of C_1 - C_4 -alkyl, hydroxy, oxo, C_1 - C_4 -alkoxycarbonyl, and hydroxycarbonyl; or C_2 - C_4 -alkenyl, which is substituted by C_1 - C_4 -alkoxycarbonyl or hydroxycarbonyl;

R⁷ represents halogen, nitro, cyano, trifluoromethyl, trifluoromethoxy, methyl, or ethyl; and

 Y^1 , Y^2 , Y^3 , Y^4 , and Y^5 each represent CH.

4. (currently amended) The compound of formula (I) according to claim 1, wherein

A represents a phenyl or a pyridyl ring;

R¹ and R³ each represent hydrogen;

R² represents fluoro, chloro, bromo, nitro, or cyano;

R⁴ represents: C₁-C₄-alkyl, which can be substituted by up to two radicals independently selected from the group consisting of hydroxy, C₁-C₄-alkoxycarbonyl, and hydroxycarbonyl; C₃-C₆cycloalkylcarbonyl, which can be substituted by up to two radicals independently selected from the group consisting of C₁-C₄-alkyl, hydroxy, oxo, C₁-C₄-alkoxycarbonyl, and hydroxycarbonyl; benzoyl, which is substituted by one, two, or three radicals independently selected from the group consisting of fluoro, chloro, bromo, cyano, C₁-C₄-alkyl, trifluoromethyl, hydroxy, C₁-C₄alkoxy, trifluoromethoxy, C₁-C₄-alkoxycarbonyl, and hydroxycarbonyl; C₁-C₄-alkoxycarbonyl, which is substituted by one or two radicals independently selected from the group consisting of benzyloxy, benzyloxycarbonyl, C_1 - C_4 -alkoxy, C_1 - C_4 -alkoxycarbonylamino, pyrrolidinyl, piperidinyl, and morpholinyl, wherein C₁-C₄-alkoxy is further substituted by C₁-C₄alkoxycarbonyl or hydroxycarbonyl, and wherein pyrrolidinyl, piperidinyl, and morpholinyl is further substituted by hydroxy, $[[oxo,]] C_1$ - C_4 -alkoxycarbonyl, or hydroxycarbonyl; furylcarbonyl, oxazolylcarbonyl, thiazolylcarbonyl, or pyridylcarbonyl, each of which is substituted by one or two radicals independently selected from the group consisting of hydroxy, amino, fluoro, chloro, bromo, C₁-C₄-alkoxy, C₁-C₄-alkoxycarbonyl, and hydroxycarbonyl, and each of which can additionally be substituted by C₁-C₄-alkyl; mono- or di-C₁-C₄alkylaminocarbonyl, wherein the alkyl moiety or at least one alkyl moiety, respectively, is substituted by phenyl, which can be further substituted by up to three radicals independently selected from the group consisting of fluoro, chloro, bromo, cyano, trifluoromethyl, C₁-C₄-alkyl,

hydroxy, C_1 - C_4 -alkoxy, trifluoromethoxy, C_1 - C_4 -alkoxycarbonyl, and hydroxycarbonyl; piperidinylcarbonyl, piperazinylcarbonyl, or morpholinylcarbonyl, each of which is substituted by one or two radicals independently selected from the group consisting of C_1 - C_4 -alkyl, hydroxy, oxo, C_1 - C_4 -alkoxy, C_1 - C_4 -alkoxycarbonyl, benzyloxycarbonyl, hydroxycarbonyl, piperidinyl, morpholinyl, pyridyl, and phenyl, wherein C_1 - C_4 -alkyl is further substituted by hydroxy, C_1 - C_4 -alkoxy, C_1 - C_4 -alkoxycarbonyl, or hydroxycarbonyl, and wherein phenyl can be further substituted by up to three radicals independently selected from the group consisting of fluoro, chloro, bromo, cyano, trifluoromethyl, C_1 - C_4 -alkyl, hydroxy, C_1 - C_4 -alkoxy, trifluoromethoxy, C_1 - C_4 -alkoxycarbonyl and hydroxycarbonyl; or a group of the formula -C(=O)-NH-SO₂-R^b, wherein R^b represents C_1 - C_4 -alkyl, which can be substituted by trifluoromethyl, or R^b represents phenyl, which can be substituted by C_1 - C_4 -alkyl, fluoro, chloro, bromo, cyano, nitro, or trifluoromethyl;

R⁵ represents methyl;

 R^6 represents hydrogen, C_1 - C_4 -alkyl, mono- or di- C_1 - C_4 -alkylaminocarbonyl, C_1 - C_4 -alkylcarbonyl, or C_1 - C_4 -alkoxycarbonyl, wherein C_1 - C_4 -alkyl and C_1 - C_4 -alkoxycarbonyl can be substituted with a radical selected from the group consisting of hydroxy, C_1 - C_4 -alkoxy, C_1 - C_4 -alkoxycarbonyl, hydroxycarbonyl, aminocarbonyl, mono- and di- C_1 - C_4 -alkylaminocarbonyl, amino, mono- and di- C_1 - C_4 -alkylamino; or

R⁶ represents a moiety of the formula

wherein R^d is selected from the group consisting of hydrogen and methyl; or

 R^6 represents a group of the formula -T-U, wherein T represents a $-CH_2-$ group, and U represents: phenyl, furyl, or oxazolyl, each of which is substituted by one or two radicals independently selected from the group consisting of fluoro, chloro, bromo, C_1-C_4 -alkyl, and a group of the formula -V-W, wherein V represents a bond, a $-CH_2-$ group, or a -CH=CH- group, and W represents C_1-C_4 -alkoxycarbonyl or hydroxycarbonyl; a group of the formula $-C(=O)-NH-SO_2-R^f$, wherein R^f represents C_1-C_4 -alkyl, which can be substituted by trifluoromethyl, or R^f represents phenyl, which can be substituted by C_1-C_4 -alkyl, fluoro, chloro, bromo, cyano, nitro, or trifluoromethyl; or a group of the formula $-C(=O)-NHR^h$, wherein R^h represents phenyl, which can be substituted by C_1-C_4 -alkoxycarbonyl or hydroxycarbonyl; or

 R^6 represents: C_3 - C_6 -cycloalkyl, which can be substituted by C_1 - C_4 -alkoxycarbonyl or hydroxycarbonyl; or a -CH=CH- group, which is substituted by C_1 - C_4 -alkoxycarbonyl or hydroxycarbonyl;

R⁷ represents trifluoromethyl or nitro; and

Y¹, Y², Y³, Y⁴, and Y⁵ each represent CH.

- 5. (previously presented) The compound of formula (I) according to any of the preceding claims, wherein A is phenyl or pyridyl.
- 6. (previously presented) The compound of formula (I) according to any of the preceding claims, wherein R¹ is hydrogen.
- 7. (previously presented) The compound of formula (I) according to any of the preceding claims, wherein R^2 is cyano.
- 8. (previously presented) The compound of formula (I) according to any of the preceding claims, wherein R^3 is hydrogen.
- 9. (previously presented) The compound of formula (I) according to any of the preceding claims, wherein R⁵ is methyl.
- 10. (previously presented) The compound of formula (I) according to any of the preceding claims, wherein R^7 is trifluoromethyl or nitro.
- 11. (currently amended) A compound of formula (IA)

(IA)

wherein

Z represents CH or N;

 R^1 and R^3 independently from each other represent hydrogen, halogen, nitro, cyano, C_1 - C_6 -alkyl, hydroxy, or C_1 - C_6 -alkoxy, wherein C_1 - C_6 -alkyl and C_1 - C_6 -alkoxy can be further substituted with one to three identical or different radicals selected from the group consisting of halogen, hydroxyl, and C_1 - C_4 -alkoxy;

 R^4 represents: C_1 - C_6 -alkyl, which can be substituted by up to three radicals independently selected from the group consisting of hydroxy, C_1 - C_6 -alkoxycarbonyl, and hydroxycarbonyl; C_3 - C_8 -cycloalkylcarbonyl, which can be substituted by up to three radicals independently selected from the group consisting of C_1 - C_6 -alkyl, hydroxy, oxo, C_1 - C_6 -alkoxycarbonyl, and

hydroxycarbonyl; C₁-C₆-alkylcarbonyl, which is substituted by phenyl-C₁-C₆-alkoxy or phenyl-C₁-C₆-alkoxycarbonyl, which in the phenyl moiety can be substituted by halogen, C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonyl, or hydroxycarbonyl; C₆-C₁₀-arylcarbonyl, which is substituted by one, two, or three radicals independently selected from the group consisting of halogen, cyano, nitro, C₁-C₆-alkyl, trifluoromethyl, hydroxy, C₁-C₆-alkoxy, trifluoromethoxy, amino, C₁-C₆-alkoxycarbonyl, hydroxycarbonyl, and phenyl; C₁-C₆-alkoxycarbonyl, which is substituted by one or two radicals independently selected from the group consisting of phenyl-C₁-C₆-alkoxy, phenyl-C₁-C₆-alkoxycarbonyl, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonylamino, and 5or 6-membered heterocyclyl, wherein C₁-C₆-alkoxy is further substituted by C₁-C₆alkoxycarbonyl, or hydroxycarbonyl, and 5- or 6-membered heterocyclyl is further substituted by hydroxy, [[oxo,]] C₁-C₆-alkoxycarbonyl, or hydroxycarbonyl; heteroarylcarbonyl, which is substituted by one or two radicals independently selected from the group consisting of hydroxy, amino, halogen, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl, and which can additionally be substituted by C₁-C₆-alkyl; mono- or di-C₁-C₆-alkylaminocarbonyl, wherein the alkyl moiety or at least one alkyl moiety, respectively, is substituted by C₆-C₁₀-aryl, which can be further substituted by up to three radicals independently selected from the group consisting of halogen, cyano, trifluoromethyl, C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy, trifluoromethoxy, C₁-C₆alkoxycarbonyl, and hydroxycarbonyl; C₆-C₁₀-arylaminocarbonyl or N-(C₁-C₆-alkyl)-N-(C₆-C₁₀aryl)aminocarbonyl, wherein aryl is substituted by one, two, or three radicals independently selected from the group consisting of halogen, cyano, trifluoromethyl, C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy, trifluoromethoxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl, and wherein alkyl, when present, can be substituted by up to three radicals independently selected from the group consisting of hydroxy, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl; C₃-C₈-

cycloalkylaminocarbonyl or N-(C₁-C₆-alkyl)-N-(C₃-C₈-cycloalkyl)aminocarbonyl, wherein cycloalkyl can be substituted by up to three radicals independently selected from the group consisting of C₁-C₆-alkyl, hydroxy, oxo, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl, and wherein alkyl, when present, can be substituted by up to three radicals independently selected from the group consisting of hydroxy, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl; heterocyclylcarbonyl, which is substituted by one, two, or three radicals independently selected from the group consisting of C_1 - C_6 -alkyl, hydroxy, oxo, C_1 - C_6 -alkoxy, C₁-C₆-alkoxycarbonyl, phenyl-C₁-C₆-alkoxycarbonyl, hydroxycarbonyl, 5- or 6-membered heterocyclyl, 5- or 6-membered heteroaryl, and C₆-C₁₀-aryl, wherein C₁-C₆-alkyl is further substituted by hydroxy, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonyl, or hydroxycarbonyl, and wherein C_6 - C_{10} -aryl can be further substituted by up to three radicals independently selected from the group consisting of halogen, cyano, trifluoromethyl, C₁-C₆-alkyl, hydroxy, C₁-C₆-alkoxy, trifluoromethoxy, C₁-C₆-alkoxycarbonyl, and hydroxycarbonyl; N-(heterocyclyl)aminocarbonyl, wherein heterocyclyl can be further substituted by up to three radicals independently selected from the group consisting of C₁-C₆-alkyl, hydroxy, oxo, C₁-C₆-alkoxy, C₁-C₆-alkoxycarbonyl, hydroxycarbonyl, and phenyl-C₁-C₆-alkyl; a group of the formula –C(=O)–NR^a–SO₂–R^b, wherein R^a represents hydrogen or C₁-C₆-alkyl, and R^b represents C₁-C₆-alkyl, which can be substituted by trifluoromethyl, or R^b represents C₆-C₁₀-aryl, which can be substituted by C₁-C₆alkyl, halogen, cyano, nitro, or trifluoromethyl; or a group of the formula -P(=O)(OR^c)₂, wherein R^c represents hydrogen or C₁-C₆-alkyl; and

R⁶ represents hydrogen, C₁-C₆-alkyl, formyl, aminocarbonyl, mono- or di-C₁-C₄-alkylaminocarbonyl, C₃-C₈-cycloalkylcarbonyl, C₁-C₆-alkylcarbonyl, C₁-C₆-alkoxycarbonyl, N-

 $(C_1-C_4-alkylsulfonyl)$ -aminocarbonyl, N- $(C_1-C_4-alkylsulfonyl)$ -N- $(C_1-C_4-alkyl)$ -aminocarbonyl-, heteroaryl, heteroarylcarbonyl, or hetero-cyclylcarbonyl, wherein C_1-C_6 -alkyl, mono- and di- C_1-C_4 -alkylaminocarbonyl, C_1-C_6 -alkylcarbonyl, C_1-C_6 -alkoxycarbonyl, heteroaryl, and heterocyclyl can be substituted with one to three identical or different radicals selected from the group consisting of aryl, heteroaryl, hydroxy, C_1-C_4 -alkoxy, hydroxycarbonyl, C_1-C_6 -alkoxycarbonyl, aminocarbonyl, mono- and di- C_1-C_4 -alkylaminocarbonyl, amino, mono- and di- C_1-C_4 -alkylamino, C_1-C_4 -alkylcarbonylamino, tri- $(C_1-C_6$ -alkyl)-silyl, cyano, N-(mono- or di- C_1-C_4 -alkylamino- C_1-C_4 -alkyl)-aminocarbonyl, N- $(C_1-C_4$ -alkoxy- C_1-C_4 -alkyl)-aminocarbonyl, and halogen; or

R⁶ represents a moiety of the formula

$*$
 N
 $^{$

wherein R^d is selected from the group consisting of hydrogen and C₁-C₆-alkyl, and n represents an integer of 1 or 2; or

 R^6 represents a group of the formula -T–U, wherein T represents a C_1 - C_6 -alkanediyl or C_2 - C_6 -alkenediyl group, and U represents: C_6 - C_{10} -aryl or 5- or 6-membered heteroaryl, each of which is substituted by one, two, or three radicals independently selected from the group consisting of halogen, C_1 - C_6 -alkyl, 5- or 6-membered heteroaryl, and a group of the formula -V–W, wherein V represents a bond or a C_1 - C_6 -alkanediyl or C_2 - C_6 -alkenediyl group, both of which can be further substituted by C_3 - C_8 -cycloalkyl, and W represents C_1 - C_6 -alkoxycarbonyl or hydroxycarbonyl; a group of the formula -C(=O)- NR^e - SO_2 - R^f , wherein R^e represents hydrogen or C_1 - C_6 -alkyl, and R^f represents C_1 - C_6 -alkyl, which can be substituted by trifluoromethyl, or R^f represents C_6 - C_{10} -aryl, which can be substituted by C_1 - C_6 -alkyl, halogen, cyano, nitro, or trifluoromethyl; a group of the formula -C(=O)- NR^gR^h , wherein R^g represents hydrogen or C_1 - C_6 -alkyl, and R^h represents C_6 - C_{10} -aryl, which can be substituted by C_1 - C_6 -alkoxycarbonyl, or hydroxycarbonyl; a group of the formula -C(=O)- NR^i - OR^k , wherein R^i and R^k independently from each other represent hydrogen or C_1 - C_6 -alkyl; or C_6 - C_{10} -arylalkoxy, which, in the aryl part, can be substituted by halogen, C_1 - C_6 -alkyl, C_1 - C_6 -alkyl, or hydroxycarbonyl; or

 R^6 represents: C_3 - C_8 -cycloalkyl, which can be substituted by up to three radicals independently selected from the group consisting of C_1 - C_6 -alkyl, hydroxy, oxo, C_1 - C_6 -alkoxycarbonyl, and hydroxycarbonyl; C_2 - C_6 -alkenyl, which can be substituted by C_1 - C_6 -alkoxycarbonyl or hydroxycarbonyl; C_1 - C_6 -alkylcarbonyl, which is substituted by C_1 - C_6 -alkoxycarbonylamino; C_1 - C_6 -alkoxycarbonyl, which is substituted by phenyl- C_1 - C_6 -alkoxycarbonyl, which in the phenyl moiety can be further substituted by halogen, C_1 - C_6 -alkyl, C_1 - C_6 -alkoxycarbonyl, or hydroxycarbonyl; or a group of the formula $-SO_2$ - R^m , wherein R^m represents C_1 - C_6 -alkyl, which

can be substituted by trifluoromethyl, or R^m represents C_6 - C_{10} -aryl, which can be substituted by C_1 - C_6 -alkyl, halogen, cyano, nitro, trifluoromethyl, C_1 - C_6 -alkoxycarbonyl, or hydroxycarbonyl.

12. (previously presented) Process for synthesizing a compound of formula (I) according to claim 1 by condensing a compound of general formula (II)

$$\mathbb{R}^{1}$$
 \mathbb{C}
 $\mathbb{C$

wherein A, R¹, and R² have the meaning indicated in claim 1, with a compound of formula (III)

$$\mathbb{R}^4$$
 \mathbb{R}^5
 \mathbb{O}_{\bullet}
(III)

wherein R^4 and R^5 have the meaning indicated in claim 1, and a compound of formula (IV)

$$\begin{array}{c}
NH_2\\
HN\\
O,\\
Y^1\\
P^7
\end{array}$$

wherein R³, R⁷, and Y¹ to Y⁵ have the meaning indicated in claim 1, in the presence of an acid or acid anhydride to give a compound of the formula (IB)

$$R^1$$
 A
 R^4
 NH
 R^5
 N
 Y^1
 Y^5
 Y^2
 Y^4
 Y^4
 X^7

(IB)

wherein A, R^1 to R^5 , R^7 , and Y^1 to Y^5 have the meaning indicated in claim 1, optionally followed, in case R^6 does not represent hydrogen, by reaction of the compound of general formula (IB) with a compound of formula (V)

$$R^{6}*-X$$
 (V),

wherein R⁶* has the meaning of R⁶ as indicated in claim 1, but does not represent hydrogen, and X represents a leaving group, in the presence of a base.

13. (previously presented) A composition comprising a compound of formula (I) according to claim 1 and a pharmacologically acceptable excipient.

14-18. (canceled)

19. (previously presented) A method for treating chronic obstructive pulmonary disease, acute coronary syndrome, acute myocardial infarction or heart failure in humans and animals comprising the step of administering a therapeutically effective amount of at least one compound of formula (I) according to claim 1.